

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO).	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,898		07/24/2003	Peter Hemingway	23615/9	1195
22879	7590	02/16/2005		EXAMINER	
		ARD COMPAN	LEE, PATRICK J		
		404 E. HARMON' ROPERTY ADMI	ART UNIT	PAPER NUMBER	
FORT CO	LLINS, C	CO 80527-2400		2878	
				DATE MAIL ED. 02/16/200	•

Please find below and/or attached an Office communication concerning this application or proceeding.

·			
	Application No.	Applicant(s)	0
	10/625,898	HEMINGWAY, PETER	_
Office Action Summary	Examiner	Art Unit	
	Patrick J. Lee	2878	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the m earned patent term adjustment. See 37 CFR 1.704(b).	NN. R 1.136(a). In no event, however, may a i. I reply within the statutory minimum of thi riod will apply and will expire SIX (6) MO atute, cause the application to become A	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	
Status			
1) ☐ Responsive to communication(s) filed on 2 2a) ☐ This action is FINAL . 2b) ☐ 3 ☐ Since this application is in condition for allo closed in accordance with the practice und	This action is non-final. wance except for formal mat	·	
Disposition of Claims			
4) ☐ Claim(s) 1-11 is/are pending in the applicated 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-11 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction are	drawn from consideration.		
Application Papers			
9) ☐ The specification is objected to by the Exam 10) ☐ The drawing(s) filed on 24 July 2003 is/are: Applicant may not request that any objection to Replacement drawing sheet(s) including the cor 11) ☐ The oath or declaration is objected to by the	a) accepted or b) ⊠ objee the drawing(s) be held in abeya rection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the priority docum application from the International But * See the attached detailed Office action for a	nents have been received. nents have been received in a priority documents have been reau (PCT Rule 17.2(a)).	Application No received in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB Paper No(s)/Mail Date 0703) Paper No	Summary (PTO-413) s)/Mail Date informal Patent Application (PTO-152) 	

Application/Control Number: 10/625,898 Page 2

Art Unit: 2878

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: With respect to figure 5, label "36" for the coated surface is not located in the figure. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Art Unit: 2878

4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 5, the use of the term "angle switching means" is vague as it could refer to the physical movement of LEDs to attain a different angle. For the purposes of examination, it will be assumed that the physical movement is not a part of this invention.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being obvious over US 5,000,569 to Nylund.

With respect to claims 1, 6, 8, & 10, Nylund discloses a color sensor comprising LEDs (42, 44, 46, 48, 50, 52) and viewers (38, 40) to detect light from sample (16), located on conveyer belt (14). Viewers (38, 40) have a plurality of photocells (86, 86') as photosensitive devices. There is a switching mechanism (124, 125) to switch between the two viewers (38, 40) to receive the output signals from viewers (38, 40) at different times into a multiplexer (126) (see column 7, lines 60-66). The detectors are capable of producing signals in different regimes of light (red, green and IR) (see column 8, lines 1 –14). It is not explicitly stated that the photocells are LEDs, but it

would be obvious to modify photocells (86, 86') into LEDs are both are functional equivalents as they are capable of detecting light and producing a signal of different wavelengths.

With respect to claims 2 & 4, the modified Nylund figure 2 clearly illustrates the photosensitive devices to be oriented at different angles.

With respect to claim 3, the modified Nylund discloses light emitters (42, 44, 46, 48, 50, 52) to emit light, while photosensitive devices (86, 86') are used to detect light.

With respect to claims 5, 7, & 11, the modified Nylund discloses control devices (134A, 134B) to control the activation of emitters (42, 44, 46, 48, 50, 52).

With respect to claim 9, Nylund does not explicitly state the use of a switching means to activate some emitters for light emission and others for light detection, but such would have been obvious to one of ordinary skill in the art in order to get as many perspective images of the sample as possible. This would allow for increased detection capability of the device.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,639,669 B2 to Hubble, III et al discloses a spectrophotometer.

US 3,724,951 to Seelbinder discloses a spectral radiation detector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Lee whose telephone number is (571) 272-

Application/Control Number: 10/625,898

Art Unit: 2878

2440. The examiner can normally be reached on Monday through Friday, 8:00 am to

5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Patrick J. Lee Examiner

Art Unit 2878

PJL

February 3rd, 2005

Stephone B. Allen

Page 5

Primary Examiner